

*Application No. 09/966686**Page 2**Amendment**Attorney Docket No. S63.2N-7405-US02***Amendments To The Claims:****Claims 1-45. (Canceled)****Claim 46. (Currently Amended)** A method of reducing a stent in cross-section comprising the steps of

a) providing a crimper having a plurality of closely spaced movable dies defining an aperture, the dies arranged to form an iris and to move simultaneously with one another, the iris having an aperture which is reducible in size by moving the dies by rotation of an actuation device, the aperture having a center, each of the dies having a longitudinal axis which is tangent to the aperture;

b) placing a stent disposed about a catheter within the aperture;

c) crimping the stent onto the catheter by reducing the size of the aperture.

Claim 47. (Previously presented) The method of claim 46 wherein the stent is disposed about a medical balloon, the medical balloon disposed about a catheter.**Claim 48. (Previously presented)** The method of claim 46 further comprising the step of cooling the temperature of the dies below ambient temperature.**Claim 49. (Previously presented)** The method of claim 48 wherein the stent is made of nitinol.**Claim 50. (Previously presented)** The method of claim 46 wherein the dies are wedge-shaped.**Claim 51. (Previously presented)** The method of claim 46 wherein at least 8 dies are provided.**Claim 52. (Previously presented)** The method of claim 46 wherein at least 16 dies are provided.**Claim 53. (Previously presented)** The method of claim 46 wherein the dies are moved cooperatively inward during the moving step.**Claim 54. (Previously presented)** The method of claim 46 wherein the entirety of the stent is disposed in the aperture during the placing step.**Claim 55. (Currently Amended)** A method of crimping a stent comprising the steps of:

a) providing a crimper having a plurality of movable dies arranged to form an iris having an aperture which is reducible in size, each of the dies having an inward facing straight side which faces the aperture, the dies constructed and arranged such that any radial line extending from the center of the aperture to outside the crimper will encounter a movable die;

Application No. 09/966686

Page 3

Amendment

Attorney Docket No. S63.2N-7405-US02

b) placing a stent disposed about a catheter within the aperture, the inward facing straight sides of the dies facing the stent, the stent cooled below ambient temperature prior to reducing the size of the aperture;

c) reducing the size of the aperture and contacting the inward facing straight sides of the dies against the stent so as to crimp the stent onto the catheter.

Claim 56. (Previously presented) The method of claim 55 wherein the stent is disposed about a medical balloon, the medical balloon disposed about a catheter.

Claim 57. (Canceled)

Claim 58. (Previously presented) The method of claim 55 wherein the stent is made of nitinol.

Claim 59. (Previously presented) The method of claim 55 wherein the dies are wedge-shaped.

Claim 60. (Previously presented) The method of claim 55 wherein at least 8 dies are provided, the dies being wedge-shaped.

Claim 61. (Previously presented) The method of claim 55 wherein at least 16 wedge-shaped dies are provided.

Claim 62. (Previously presented) The method of claim 55 wherein the entirety of the stent is disposed in the aperture during the placing step.

Claim 63. (Previously presented) A method of reducing a stent in cross-section comprising the steps of

a) providing a crimper having a plurality of movable dies arranged to form an iris, the iris defining an aperture having a center, the dies constructed and arranged such that any radial line extending from the center of the aperture to outside the crimper will encounter a movable die, the dies in mechanical communication with an actuator, rotary motion of the actuator causing the aperture to increase in size or decrease in size;

b) placing a stent disposed about a catheter within the aperture;

c) applying rotary motion to the actuator to reduce the size of the aperture sufficiently to contact the dies against the stent and reduce the stent in cross-section.

Claim 64. (Previously presented) The method of claim 63 wherein the stent is disposed about a medical balloon, the medical balloon disposed about a catheter.

Claim 65. (Previously presented) The method of claim 63 further comprising the step of cooling the temperature of the dies below ambient temperature.

Application No. 09/966686

Page 4

Amendment
Attorney Docket No. S63.2N-7405-US02

Claim 66. (Previously presented) The method of claim 65 wherein the stent is made of nitinol.

Claim 67. (Previously presented) The method of claim 63 wherein the dies are wedge-shaped.

Claim 68. (Previously presented) The method of claim 63 wherein at least 8 dies are provided.

Claim 69. (Previously presented) The method of claim 63 wherein at least 16 dies are provided.

Claim 70. (Previously presented) The method of claim 63 wherein the dies are moved cooperatively inward during the moving step.

Claim 71. (Previously presented) The method of claim 63 wherein the entirety of the stent is disposed in the aperture during the placing step.

Claims 72. (Currently Amended) A method of reducing a stent in cross-section comprising the steps of

- a) providing a crimper having eight or more movable dies defining an aperture having a center, the dies constructed and arranged such that any radial line extending from the center of the aperture to outside the crimper will encounter a movable die each die having an inward facing flat portion which faces the center of the aperture, the dies arranged to form an iris comprising at least eight of the inward facing flat portions, the aperture being reducible in size by moving the inward facing flat portions toward the center of the aperture;
- b) placing a stent disposed about a catheter within the aperture, the stent made of nitinol;
- c) crimping the stent onto the catheter by reducing the size of the aperture, the inward facing flat portions contacting the stent.

Claim 73. (Previously presented) The method of claim 72 wherein the stent is disposed about a medical balloon, the medical balloon disposed about a catheter.

Claim 74. (Previously presented) The method of claim 72 further comprising the step of cooling the temperature of the dies below ambient temperature.

Claim 75. (Canceled)

Claim 76. (Previously presented) The method of claim 72 wherein the dies are wedge-shaped.

Claim 77. (Previously presented) The method of claim 72 wherein at least 16 dies are provided.

Claim 78. (Previously presented) The method of claim 72 wherein the dies are moved cooperatively inward during the moving step.

Claim 79. (Previously presented) The method of claim 72 wherein the entirety of the stent is disposed in the aperture during the placing step.

Application No. 09/966686
Page 5

Amendment
Attorney Docket No. S63.2N-7405-US02

Claim 80. (Canceled)